

YMP-LBNL Quality Assurance
**SEISMIC REFLECTION OPERATION CHECKLIST
MONTHLY TESTS**

PI: _____ Survey Line: _____ Date: ____ / ____ / ____

PERFORMANCE	Satisf.	Unsat.	N/A	Date
1.0 Monthly Tests on Digital Magnetic Tape				
1.1 Recorder odd/even crossfeed, analog-to digital linearity, gain accuracy	_____	_____	_____	_____
2.0 Geophones, Cables, and Array Terminals (if used)				
2.1 All geophones of same model and frequency response and have same electrical connections to cable	_____	_____	_____	_____
2.2 Individual receiver arrays checked for impedance, electricval continuity, phase distortion, polarity, physical integrity	_____	_____	_____	_____
2.3 Array terminals checked	_____	_____	_____	_____
3.0 Surveying				
3.1 Theodolites and electronic distance measurer field checked as specified	_____	_____	_____	_____
3.2 Tribrachs collimated	_____	_____	_____	_____

I certify with my signature that I have verified these operational checkpoints:

_____ Date: ____ / ____ / ____

YMP-LBNL Quality Assurance
**SEISMIC REFLECTION OPERATION CHECKLIST
DAILY TESTS**

PI: _____ Survey Line: _____ Date: / /

PERFORMANCE	Satisf.	Unsat.	N/A
1.0 Instrument Tests on Digital Magnetic Tape			
1.1 Impulse response	_____		
1.2 Dynamic range	_____		
1.3 Equivalent input noise	_____		
1.4 Oscillator test	_____		
2.0 Geophones, Cables and Array Terminals (if used)			
2.1 Cable continuity and leakage within specifications	_____		
2.2 Power supply of array terminals with specifications	_____		
2.3 Geophone patterns deployed as close as possible to written instruction/specification	_____		
2.4 Geophones planted within 10 degrees of vertical	_____		
2.5 Number of active channels is as specified	_____		
2.6 Daily test of array terminals within specification	_____		
3.0 Surveying			
3.1 Survey notes satisfactorily maintained	_____		
4.0 P-wave Vibrator Similarity Test on Digital Magnetic Tape			
4.1 Vibrator 1	_____		
4.2 Vibrator 2	_____		
4.3 Vibrator 3	_____		
4.4 Vibrator 4	_____		
4.5 Vibrator 5	_____		
4.6 Vibrator 6	_____		

5.0 Land-Airgun Synchronicity Test on Digital Magnetic Tape

- 5.1 Land-airgun 1 _____
- 5.2 Land-airgun 2 _____
- 5.3 Land-airgun 3 _____
- 5.4 Land-airgun 4 _____
- 5.5 Land-airgun 5 _____
- 5.6 Land-airgun 6 _____

6.0 Shear-wave Vibrator Similarity Test on Digital Magnetic Tape

- 6.1 Vibrator 1 _____
- 6.2 Vibrator 2 _____
- 6.3 Vibrator 3 _____
- 6.4 Vibrator 4 _____
- 6.5 Vibrator 5 _____
- 6.6 Vibrator 6 _____

7.0 Test of Shot Boxes

- 7.1 Shotbox 1 _____
- 7.2 Shotbox 2 _____
- 7.3 Shotbox 3 _____
- 7.4 Shotbox 4 _____

8.0 Observer

- 8.1 Properly maintains observer's log and
records data as it is being produced _____
- 8.2 Properly monitors weather and wind
conditions _____
- 8.3 Halts data acquisition due to equipment
malfunction or adverse weather
conditions _____
- 8.4 Properly records uphole shot times _____

9.0 Additional Comments (Optional, write "None" if no additional comments):

I certify with my signature that I have verified these operational checkpoints:

_____ Date: / /

YMP-LBNL Quality Assurance
SEISMIC REFLECTION OPERATION CHECKLIST
DATA PROCESSING

PI: _____ Survey Line: _____ Date: ____ / ____ / ____

PERFORMANCE	Satisf.	Unsat.	N/A
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1.0 Data Processor

- | | | | |
|-----|---|-------|--|
| 1.1 | Properly maintains an inventory of all
record tapes/cartridges with all
pertinent information | _____ | |
| 1.2 | Properly maintains records indicating the
processing flow followed for all data
providing as detailed information as
possible on computer programs (including
version numbers) used and inputs
specified | _____ | |

2.0 Additional Comments (Optional, write "None" if no additional comments):

I certify with my signature that I have verified these operational checkpoints:

_____ Date: ____ / ____ / ____